

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for controlling electronic devices through a host device, the method comprising:
establishing frequency-based, real-time electronic communications over a network between the host device and a controlled device, wherein electronic communication between the host device and the controlled device always occurs at an assigned control frequency;
assigning [[a]] the control frequency for the controlled device using a 2^N time slicing algorithm, where N is a non-negative integer, wherein each control frequency that is assigned has a value of 2^N ;
generating, at the host device, control input for the controlled device; and
sending the control input to the controlled device at the assigned control frequency.
2. (Original) The method of claim 1, further comprising receiving, at the host device, output from the controlled device in response to the control input.
3. (Cancelled)
4. (Original) The method of claim 1, further comprising establishing real-time electronic communications with a plurality of controlled devices and assigning a discrete control frequency for each controlled device using the 2^N time slicing algorithm, where N is a non-negative integer.
5. (Original) The method of claim 4, wherein N is independently determined for each controlled device of the plurality of the controlled devices.

6. (Original) The method of claim 1, wherein the 2^N time slicing algorithm comprises assigning the control frequency at 2^N hertz, where N is a non-negative integer that will yield a discrete control frequency in proximity to a preferred control frequency of the controlled device.

7. (Original) The method of claim 1, further comprising initiating a control loop process on the host device when electronic communication is established with a controlled device.

8. (Original) The method of claim 1, further comprising accessing the host device from a remote computing device via the Internet.

9. (Original) The method of claim 8, further comprising providing information relating to the controlled device to a user at the remote computing device.

10. (Original) The method of claim 9, further comprising receiving user input at the host device from the user at the remote computing device, wherein the input relates to the controlled device.

11. (Currently Amended) A computing device configured for controlling electronic devices, the computing device comprising:

a processor;

memory in electronic communication with the processor; and

executable instructions executable by the processor, wherein the executable instructions are configured to implement a method comprising:

establishing frequency-based, real-time electronic communications over a network between the computing device and a controlled device, wherein electronic communication between the computing device and the controlled device always occurs at an assigned control frequency;

assigning ~~[[a]]~~ the control frequency for the controlled device using a 2^N time slicing algorithm, wherein N is a non-negative integer, wherein each control frequency that is assigned has a value of 2^N ;
generating, at the computing device, control input for the controlled device; and
sending the control input to the controlled device at the assigned control frequency.

12. (Original) The computing device of claim 11, wherein the method further comprises receiving, at the computing device, output from the controlled device in response to the control input.

13. (Cancelled)

14. (Original) The computing device of claim 11, wherein the method further comprises establishing real-time electronic communications with a plurality of controlled devices and assigning a discrete control frequency for each controlled device using the 2^N time slicing algorithm, where N is a non-negative integer.

15. (Original) The computing device of claim 14, wherein N is independently determined for each controlled device of the plurality of controlled devices.

16. (Original) The computing device of claim 11, wherein the 2^N time slicing algorithm comprises assigning the control frequency at 2^N hertz, where N is a non-negative integer that will yield a discrete control frequency in proximity to a preferred control frequency of the controlled device.

17. (Original) The computing device of claim 11, wherein the method further comprises initiating a control loop process on the computing device when electronic communication is established with a controlled device.
18. (Original) The computing device of claim 17, wherein the method further comprises initiating a torque/current control loop process at a microcontroller on the controlled device when the controlled device comprises a motor.
19. (Original) The computing device of claim 11, wherein the method further comprises accessing the computing device from a remote computing device via the Internet.
20. (Original) The computing device of claim 19, wherein the method further comprises providing information relating to the controlled device to a user at the remote computing device.
21. (Original) The computing device of claim 20, wherein the method further comprises receiving user input at the computing device from the user at the remote computing device, wherein the input relates to the controlled device.
22. (Currently Amended) A computer-readable medium for storing program data, wherein the program data comprises executable instructions for implementing a method in a computing device for controlling electronic devices, the method comprising:
establishing frequency-based, real-time electronic communications over a network between the computing device and a controlled device, wherein electronic communication between the computing device and the controlled device always occurs at an assigned control frequency;
assigning [[a]] the control frequency for the controlled device using a 2^N time slicing algorithm, where N is a non-negative integer, wherein each control frequency that is assigned has a value of 2^N ;

generating, at the computing device, control input for the controlled device; and
sending the control input to the controlled device at the assigned control frequency.

23. (Original) The computer-readable medium of claim 22, wherein the method further comprises receiving, at the computing device, output from the controlled device in response to the control input.

24. (Cancelled)

25. (Original) The computer-readable medium of claim 22, wherein the method further comprises establishing real-time electronic communications with a plurality of controlled devices and assigning a discrete control frequency for each controlled device using the 2^N time slicing algorithm, where N is a non-negative integer.

26. (Original) The computer-readable medium of claim 25, wherein N is independently determined for each controlled device of the plurality of controlled devices.

27. (Original) The computer-readable medium of claim 22, wherein the 2^N time slicing algorithm comprises assigning the control frequency at 2^N hertz, where N is a non-negative integer that will yield a discrete control frequency in proximity to a preferred control frequency of the controlled device.

28. (Original) The computer-readable medium of claim 22, wherein the method further comprises initiating a control loop process on the computing device when electronic communication is established with a controlled device.

29. (Original) The computer-readable medium of claim 22, wherein the method further comprises accessing the computing device from a remote computing device via the Internet.

30. (Original) The computer-readable medium of claim 29, wherein the method further comprises providing information relating to the controlled device to a user at the remote computing device.

31. (Original) The computer-readable medium of claim 30, wherein the method further comprises receiving user input at the computing device from the user at the remote computing device, wherein the input relates to the controlled device.